UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,747	03/23/2007	Hassane Essafi	BDL-497XX	9444

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EXAMINER
WITZENBURG, BRUCE A

ART UNIT	PAPER NUMBER
2166	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *26 May 2006*.
2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-23* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-23* is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on *26 May 2006* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All   b) ☐ Some *   c) ☐ None of:
        1. ☒ Certified copies of the priority documents have been received.
        2. ☐ Certified copies of the priority documents have been received in Application No. _____.
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *5/26/2006*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-23 are pending in this office action.

2.   Pending modification of the claims in order to overcome the objections and

rejections stated below, the invention with regards to the currently claimed scope

appears to be of allowable subject matter.

Claim Objections

3.   The following are objected to:

a.   "the multimedia document" (Claim 1, lines 5-6; lines 10-11 Note this

seems to refer back to a plural quantity of documents and should be corrected

accordingly)

b.   "the energy" for lack of antecedent basis (Claim 1, line 7; Claim 21, line 7)

c.   "the oscillation rate" for lack of antecedent basis (Claim 1, line 7)

d.   "the most pertinent terms" for lack of antecedent basis (Claim 1, line 13)

e.   "the point of view" for lack of antecedent basis (Claim 1, line 15)

f.   "the matrix" for lack of antecedent basis (Claim 1, line 17)

g.   "the leaves" for lack of antecedent basis (Claim 1, line 28)

h.   "the nodes" for lack of antecedent basis (Claim 1, line 29)

i.   "the information" for lack of antecedent basis (Claim 1, line 29; Claim 9,

line 16)

j.   "the documents" for lack of antecedent basis (Claim 1, line 33; Claim 2,

line 4)

k.   "An indexing method" for lack of antecedent basis (Claims 2-23, line 1)

l.   "the fingerprint base" for lack of antecedent basis (Claim 2, line 2)

m.   "the number of terms" for lack of antecedent basis (Claim 2, line 3)

n.   "each document" for lack of antecedent basis (Claim 3, line 2

o.   "a concept ci" for lack of antecedent basis (Claim 3, lines 2-3 note this is

already referred to previously)

p.   "the document" for lack of antecedent basis (Claim 3, line 4; line 6; line 8;

Claim 10, lines 4-5; Claim 18, line 3)

q.   "the frequency" for lack of antecedent basis (Claim 3, lines 4-5)

r.   "the identifies" for being stated improperly. (Claim 3, line 5 Examiner

suggents "(that/which) identifies")

s.   "the closest" for lack of antecedent basis (Claim 3, line 8)

t.   "the partitioning" for lack of antecedent basis (Claim 4, line 3)

u.   "the distribution error" for lack of antecedent basis (Claim 4, line 5)

v.   "the term ti" for lack of antecedent basis (Claim 4, line 7; Claim 5, line 9)

w.   "the error" for lack of antecedent basis (Claim 4, line 8; line 9)

x.   "the terms ti" for lack of antecedent basis (Claim 4, line 10; Claim 6, line

14)

y.   "the two terms ti and tj" for lack of antecedent basis (Claim 5, line 5)

z.   "the furthest apart" for lack of antecedent basis (Claim 5, line 6)

aa.   "the greatest distance" for lack of antecedent basis (Claim 5, line 6)

bb.   "the distance Dki" for lack of antecedent basis (Claim 5, line 9)

cc.   "the term tk" for lack of antecedent basis (Claim 5, line 9; line 10; line 11;

line 12)

dd.   "the term tj" for lack of antecedent basis (Claim 5, line 10; Claim 6, line 9)

ee.   "the term tk" for lack of antecedent basis (Claim 5, line 11)

ff.   "the desired number" for lack of antecedent basis (Claim 5, line 13)

gg.   "the terms" for lack of antecedent basis (Claim 5, line 15)

hh.   "the decomposition error" for lack of antecedent basis (Claim 6, line 5)

ii.   "the centers of gravity" for lack of antecedent basis (Claim 6, line 7; Claim

21, line 5)

jj.   "the error" for lack of antecedent basis (Claim 6, line 18)

kk.   "the purpose of structuring" for lack of antecedent basis (Claim 7, lines 2-

3)

ll.   "the desired number of groups" for lack of antecedent basis (Claim 7, line

6)

mm.   "the subsets obtained" for lack of antecedent basis (Claim 8, line 3)

nn.   "the set C" for lack of antecedent basis (Claim 9, line 4)

oo.   "the matrix M" for lack of antecedent basis (Claim 9, line 7; line 9; lines 9-

10, line 12)

pp.   "the covariance matrix ~M" for lack of antecedent basis (Claim 9, line 8)

qq.   "the elements" for lack of antecedent basis (Claim 9, line 11-12)

rr.   "the value" for lack of antecedent basis (Claim 9, line 13)

ss.   "the set of concepts C" for lack of antecedent basis (Claim 9, line 14)

tt.   "the node" for lack of antecedent basis (Claim 9, line 17)

uu.   "the maximum of all pi" for lack of antecedent basis (Claim 9, line 18)

vv.   "the minimum of all pi" for lack of antecedent basis (Claim 9, line 19)

ww.   "the data set" for lack of antecedent basis (Claim 9, line 19)

xx.   "the structural components" for lack of antecedent basis (Claim 10, lines 2-

3; line 3; line 6; Claim 13, line 3)

yy.   "the compliments" for lack of antecedent basis (Claim 10, line 3)

zz.   "the textural components" for lack of antecedent basis (Claim 10, line 4;

line 14; line 26; Claim 13, line 6)

aaa.   "the orientation" for lack of antecedent basis (Claim 10, line 8)

bbb.   "the local variation" for lack of antecedent basis (Claim 10, line 9)

ccc.   "the local properties" for lack of antecedent basis (Claim 10, line 12; Claim

11, line 2)

ddd.   "the global properties" for lack of antecedent basis (Claim 10, lines 12-13;

Claim 12, line 2)

eee.   "the set of descriptive elements" for lack of antecedent basis (Claim 10,

line 21)

fff.   "the terms" for lack of antecedent basis (Claim 10, line 22)

ggg.   "the local and global properties" for lack of antecedent basis (Claim 10,

line 23)

hhh.   "the parameters" for lack of antecedent basis (Claim 10, line 24; Claim 20,

line 2; Claim 21, line 2; Claim 22, line 2)

iii.   "the occurrences" for lack of antecedent basis (Claim 10, lines 27-28)

jjj.   "the positions" for lack of antecedent basis (Claim 10, line 28)

kkk.   "the frequencies" for lack of antecedent basis (Claim 10, lines 28-29)

lll.   "said concepts" for lack of antecedent basis (Claim 10, line 29)

mmm. "the support types" for lack of antecedent basis (Claim 11, line 4)

nnn.   "the length and width dimensions" for lack of antecedent basis (Claim 11,

line 5

ooo.   "the support" for lack of antecedent basis (Claim 11, line 6; line 6; lines 7-

8)

ppp.   "the main direction" for lack of antecedent basis (Claim 11, line 6)

qqq.   "the shape" for lack of antecedent basis (Claim 11, line 6; Claim 23, line

15)

rrr.   "the pixles" for lack of antecedent basis (Claim 11, line 7)

sss.   "the number of each type of support" for lack of antecedent basis (Claim

12, lines 4-5)

ttt.   "the spatial disposition" for lack of antecedent basis (Claim 12, line 5)

uuu.   "the image structures" for lack of antecedent basis (Claim 14, line 3)

vvv.   "the digitized image" for lack of antecedent basis (Claim 14, line 4)

www. "the set of pixles" for lack of antecedent basis (Claim 14, lines 4-5)

xxx.   "the number of rows" for lack of antecedent basis (Claim 14, line 6)

yyy.   "the number of columns" for lack of antecedent basis (Claim 14, line 6)

zzz.   "the vertical gradient image" for lack of antecedent basis (Claim 14, line 7)

aaaa. "the horizontal gradient image" for lack of antecedent basis (Claim 14, line 8)

bbbb. "the local orientation" for lack of antecedent basis (Claim 14, lines 9-10)

cccc. "the orientation" for lack of antecedent basis (Claim 14, line 11)

dddd. "the gradient" for lack of antecedent basis (Claim 14, line 11)

eeee. "the classes" for lack of antecedent basis (Claim 14, line 14)

ffff.   "the support regions" for lack of antecedent basis (Claim 14, line 16)

gggg. "the difference or similarity" for lack of antecedent basis (Claim 16, line 4-5)

hhhh. "the content of an image" for lack of antecedent basis (Claim 16, line 5; line 6)

iiii.   "the values" for lack of antecedent basis (Claim 16, line 8)

jjjj.   "the value SV(j)" for lack of antecedent basis (Claim 17, line 3; line 4)

kkkk. "the corresponding element" for lack of antecedent basis (Claim 17, line 3)

llll.   "the minimum M1" for lack of antecedent basis (Claim 17, line 5)

mmmm.   "the sampled audio document" for lack of antecedent basis (Claim 19, line 3)

nnnn. "the energy of the audio signal frames" for lack of antecedent basis (Claim 20, lines 4-5)

oooo. "the standard deviation of frame energies" for lack of antecedent basis (Claim 20, lines 5-6)

pppp. "the clips" for lack of antecedent basis (Claim 20, line 6; line 10)

qqqq. "the sound variation ratio" for lack of antecedent basis (Claim 20, line 6)

rrrr.   "the low energy ratio" for lack of antecedent basis (Claim 20, lines 6-7)

ssss. "the rate of oscillation about a predetermined value" for lack of antecedent basis (Claim 20, lines 7-8)

tttt.   "the high rate of oscillation about a predetermined value" for lack of antecedent basis (Claim 20, line 8)

uuuu. "the difference" for lack of antecedent basis (Claim 20, line 9)

vvvv. "the number of oscillation rates" for lack of antecedent basis (Claim 20, line 9)

wwww.   "the mean oscillation rate" for lack of antecedent basis (Claim 20, line 10)

xxxx. "the frames" for lack of antecedent basis (Claim 20, line 10)

yyyy. "the variance" for lack of antecedent basis (Claim 20, lines 10-11)

zzzz. "the oscillation rate" for lack of antecedent basis (Claim 20, line 11)

aaaaa.   "the ratio of silent frames" for lack of antecedent basis (Claim 20, line 11)

bbbbb.   "the frequency spectrum" for lack of antecedent basis (Claim 21, line 5)

ccccc. "the short fourier transform" for lack of antecedent basis (Claim 21, line 6)

ddddd.   "the audio signal" for lack of antecedent basis (Claim 21, line 6; line

7)

eeeee.   "the bandwidth" for lack of antecedent basis (Claim 21, line 6)

fffff.   "the ratio" for lack of antecedent basis (Claim 21, line 7)

ggggg.   "the total energy" for lack of antecedent basis (Claim 21, line 8)

hhhhh.   "the entire frequency band" for lack of antecedent basis (Claim 21,

line 8)

iiiii.   "the sampled audio signal" for lack of antecedent basis (Claim 21, lines 8-

9)

jjjjj.   "the mean value" for lack of antecedent basis (Claim 21, line 9)

kkkkk. "the cutoff frequency" for lack of antecedent basis (Claim 21, line 10)

lllll.   "the shapes" for lack of antecedent basis (Claim 23, line 2)

mmmmm.   "the query image or image portion" for lack of antecedent basis

(Claim 23, line 7)

nnnnn.   "the projection movement dimension" for lack of antecedent basis

(Claim 23, lines 10-11)

ooooo.   "the statistical properties" for lack of antecedent basis (Claim 23,

line 13; line 16)

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

Regarding claim 1, the term "such as" provides a set of unknown interpretation and do

not define the scope of a claim with respect to what unrecited additional components or

steps, if any, are excluded from the scope of the claim. (See MPEP 2111.03 [R-3]

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to BRUCE A. WITZENBURG whose telephone number is

(571)270-1908. The examiner can normally be reached on M-F 9:00 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain Alam can be reached on 571-272-3978. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BW

/Etienne P LeRoux/
Primary Examiner, Art Unit 2161